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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,958	01/15/2002	Takeshi Imaura.	JP920000330US1	5188

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EXAMINER	
TANG, KUO LIANG J	

ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/047,958	IMAURA, TAKESHI	
	Examiner	Art Unit	
	Kuo-Liang J Tang	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the application filed on 1/15/2002.

The priority date for this application is 2/2/2001.

Claims 1-28 are pending and have been examined.

Claim Objections

2. Claim 3 is objected to because of the following informalities:

As Per Claim 3, line 7, the "and; and" should be "and".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 10 are under the second paragraph, as being insufficient antecedent basis for this limitation in the claim.

Claim 5 line 3, Claim 10 line 3 recite the limitation "PER". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

For prior art rejection purpose, the examiner interprets "PER" as "encoding rule".

5. Claims 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In ***Ex parte Lyell***, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

In claims 23-28, it is unclear whether an article of manufacture or a program code or a process of generating a workflow is claimed. With an article of manufacture recited in the preamble, one would expect to find in the body of the claim means or devices having functions to generate a workflow. However, one only found method steps for generating a workflow.

Correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. § 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 23-28 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

A single claim which claims both an apparatus and the method steps of using the apparatus should also be rejected under 35 U.S.C. 101, ***Ex parte Lyell***, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990), based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. ***Id.*** at 1551.

Correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-28 are rejected under 35 U.S.C. 102(a) as being anticipated by Imamura et al., "Mapping between ASN.1 and XML", IEEE, 8-12 Jan. 2001 (hereinafter Imamura2001).

As Per Claim 1, Imamura2001 teaches that Since ASN.1 data are structured data, it should be possible to represent the same information in Extensible Markup Language (XML). The translation between ASN.1 and XML will enable us to manipulate efficient ASN.1 data in an user-friendly manner. (E.g. see Abstract and associated text). In that Imamura2001 discloses the method that covering an XML data encoding method comprising the steps of:

"converting into ASN.1 abstract syntax type a grammar definition for defining the grammar of XML data" (E.g. see page 59-61 Section 4.1);

"separating said XML data into the contents text of a syntactic element and a structure an element name including the structure" (E.g. see page 60 Section 4.1.1);

"converting said structure into an ASN.1 abstract syntax value that conforms to said ASN.1 abstract syntax type" (E.g. see page 61-62 Section 4.2);

"converting said ASN.1 abstract syntax value into an ASN.1 transfer syntax" (E.g. see page 61-62 Section 4.2);

"compressing said contents of said syntactic element; and combining the compressed contents of said syntactic element and said ASN.1 transfer syntax" (E.g. see page 61-62 Section 4.2 and page 62-63 Section 5.2).

As Per claim 2, the rejection of claim 1 is incorporated and further Imamura2001 teaches:

"wherein said grammar definition includes an attribute (E.g. see page 60 Section 4.1.1), a process instruction and a grammar definition entry other than said syntactic element, further comprising the steps of: converting said grammar definition into a different grammar definition, so that said grammar definition entry other than said syntactic element is included in said syntactic element as a special element" (E.g. see page 61, Figure 7 and associated text); and

"converting said XML data into different XML data in conformation with said different grammar definition" (E.g. see page 61, Figure 7 and associated text, e.g. see page 61-62 Section 4.2).

As Per claim 3, the rejection of claim 1 is incorporated and further Imamura2001 teaches:

"wherein said grammar definition is a DTD (E.g. see page 60 Table 1, page 64 Table 2 and associated text), the element contents include operators selected from among: "," (E.g. see page 60, Table 1, column DTD, line 4, which states "... (B . a ? , B . c) ..."), "|" (E.g. see page 60, Table 1, column DTD, line 11, which states "... C . a | C . b ..."), "?" (E.g. see page 60, Table 1, column DTD, line 4, which states "... (B . a ?, B .c

) ..."), "*" and "+", no operator, any combination of these operators"; and wherein for said ASN.1 abstract syntax type, said "," operator is represented by a "sequence" type (E.g. see page 60, Table 1, column "ASN.1 definition" , line 2, which states " ... ::= **SEQUENCE** {"), said "|" operator is represented by a "choice" type (E.g. see page 60, Table 1, column "ASN.1 definition" , line 5, which states " ... ::= **CHOICE** {"), said "?" operator is represented by a combination of a "sequence" type and a keyword "OPTIONAL", said "*" operator is represented by a "sequence-of" type, said "+" operator is represented by a "sequence-of" type having a limited size, and a case wherein none of said operators is present is represented by a "defined" type" (E.g. see page 60 Table 1, page 64, Table 2 and associated text).

As Per claim 4, the rejection of claim 3 is incorporated and further Imamura2001 teaches:

"wherein at said step of converting said grammar definition into said different grammar definition, an attribute included in said grammar definition is represented as an attribute element that can be uniquely determined, and is handled as the child element of a parent element of said attribute" (E.g. see page 60-61 Section 4.1.1-4.1.2);

"the attribute value of said attribute is regarded as CDATA (E.g. see page 60 Section 4.1.1, and see Table 1, column DTD, lines 4-10) and is handled as the child element of said attribute element; when said attribute is "REQUIRED", said attribute element is represented by a syntactic element; when said attribute is "IMPLIED", and/or when a default value is defined as said attribute, said attribute element is represented by an element for which said "?" operator is employed, and wherein at said step of

converting said XML data into different XML data, an attribute included in said syntactic element of said XML data is represented as an attribute element that can be uniquely determined, and is handled as the child element of a parent element of said attribute" (E.g. see page 60-61 Section 4.1.1-4.1.2 and see page 60 Table 1, page 64, Table 2 and associated text).

As Per claim 5, the rejection of claim 1 is incorporated and further Imamura2001 teaches:

"wherein at said step of converting said ASN.1 abstract syntax value into said ASN.1 transfer syntax, the PER rules are employed" (E.g. see page 57-58, Section 1 to Section 2.1 and Figure. 2 and associated text).

As Per claim 6, Imamura2001 teaches a method for decoding encoded XML data comprising the steps of:

"converting a grammar definition for defining the grammar of XML data into ASN.1 abstract syntax type" (E.g. see page 58-59 Section 3);

"separating encoded XML data into an ASN.1 transfer syntax and the contents text of a compressed syntactic element" (E.g. see page 59-62 Section 4);

"converting said ASN.1 transfer syntax into an ASN.1 abstract syntax value that conforms to said ASN.1 abstract syntax type" (E.g. see page 59-62 Section 4);

"converting said ASN.1 abstract syntax value into the structure of XML data that conforms to said grammar definition" (E.g. see page 59-62 Section 4);

"decompressing said contents of said compressed syntactic element" (E.g. see page 59-62 Section 4); and

"combining the decompressed contents of said syntactic element and said structure of said XML data" (E.g. see page 59-62 Section 4).

As per Claims 7-10, the rejection of claim 6 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 2-5 respectfully.

As Per Claim 11, is the system claim corresponding to the method claim 1 and is rejected under the same reason set forth in connection of the rejection of claim 1.

As per Claims 12-15, the rejection of claim 11 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 2-5 respectfully.

As Per Claim 16, is the system claim corresponding to the method claim 6 and is rejected under the same reason set forth in connection of the rejection of claim 6.

As per Claims 17-20, the rejection of claim 16 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 2-5 respectfully.

As Per claim 21, the rejection of claim 4 is incorporated and further Imamura2001 teaches:

"excepting a case wherein a default value is defined as said attribute and the attribute value of said attribute matches said default value" (E.g. see page 59-62 Section 4).

As Per claim 22, the rejection of claim 6 is incorporated and further Imamura2001 teaches:

"wherein the structure is an element name including the structure" (E.g. see page 60 Section 4.1.1).

As Per Claim 23, is the computer-readable medium claim corresponding to the method claim 1 and is rejected under the same reason set forth in connection of the rejection of claim 1.

As Per Claim 24, is the computer-readable medium claim corresponding to the method claim 6 and is rejected under the same reason set forth in connection of the rejection of claim 6.

As Per Claim 25, is the storage device claim corresponding to the method claim 1 and is rejected under the same reason set forth in connection of the rejection of claim 1.

As Per Claim 26, is the storage device claim corresponding to the

method claim 6 and is rejected under the same reason set forth in connection of the rejection of claim 6.

As Per Claim 27, is the computer-readable medium claim corresponding to the method claim 11 and is rejected under the same reason set forth in connection of the rejection of claim 11.

As Per Claim 28, is the computer-readable medium claim corresponding to the method claim 16 and is rejected under the same reason set forth in connection of the rejection of claim 16.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is (571) 272-3705. The examiner can normally be reached on 8:30AM - 7:00PM (Monday – Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kuo-Liang J. Tang

Software Engineer Patent Examiner

TUAN DAM
SUPERVISORY PATENT EXAMINER